

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/768,230	01/30/2004	Edward Nicholl	A01491	6201	
21898 75	90 03/21/2006		EXAMINER		
ROHM AND HAAS COMPANY			SELLERS, ROBERT E		
PATENT DEPARTMENT 100 INDEPENDENCE MALL WEST		ART UNIT	PAPER NUMBER		
PHILADELPHI	IA, PA 19106-2399		1712	1712	
			DATE MAILED: 03/21/2000	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/768,230	NICHOLL ET AL.			
Office Action Summary	Examiner	Art Unit			
	Robert Sellers	1712			
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	NATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
· _					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-11</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examine	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
T					
Attachment(s)	. 🗖	11			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail Da				
3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/30/2004</u> .	_	atent Application (PTO-152)			

Art Unit: 1712

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daly et al. Patent No. 6,407,181 in view of Muthiah et al. Patent No. 6,048,949.

- 1. Daly et al. (col. 1, line 66 to col. 2, line 8) discloses a coating powder applicable on a wood, hardboard or medium density fiber board (col. 7, lies 14-16) having a 60° gloss of from 5 to 50 (col. 1, lines 46-48) comprising a glycidyl methacrylate copolymer, a carboxylic acid functional polyester (deemed to be a suitiable species of carboxy-functional curing agent according to page 6, lines 1-5 of the specification) and auxiliary substances such as pigments, dyestuffs, flow control agents, plasticizers and/or crosslinking catalysts as well as fillers (col. 6, lines 54-67).
- 2. The claimed from 1 to 60 phr of diatomaceous earth is not recited.

  Muthiah et al. sets forth a low temperature curable powder coating containing an unsaturated polyester and up to 200 phr of fillers such as diatomaceous earth (col. 6, lines 39-43) curable at temperatures of as low as 121°C (col. 7, lines 38-41, converted from 250°F) and applicable on wood, hardboard and medium density fiber board (col. 7, lines 46-50). It would have been obvious to employ the diatomaceous earth of Muthiah et al. as the filler of Daly et al. in order to modify the physical properties thereof.

Application/Control Number: 10/768,230 Page 3

Art Unit: 1712

3. The claimed melt flow is not recited. Based on the equivalent glycidyl methacrylate polymer and carboxylic acid functional polyester used for the same purpose as a powder coating for wood, the coating powder of Daly et al. inherently exhibits a melt flow within the claimed limits. Daly et al. (col. 8, Table 2, Samples, 8, 10 and 11; and col. 9, lines 8-10) reveals the effect on the gloss of varying the molecular weight and equivalent weight of the glycidyl functional resin GMA.

It would have been obvious to utilize a greater concentration of a lower epoxy equivalent weight GMA to increase the 60° gloss to above the claimed 20 units.

4. Daly et al. acknowledges the heat sensitivity of coating wood substrates such that the curing temperature should not exceed 170°C (col. 1, lines 24-27). Although Daly et al. reports a curing temperature of a mimimum of 350°C for up to 5 minutes, it would have been obvious to lower the temperature to within the range of less than 131°C required in claims 9-11 in order to protect the wood substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Robert Sellers Primary Examiner Art Unit 1712

rs 3/18/2006